

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A brake system for a heavy vehicle, comprising:
 - a first ~~type~~ species of brake component,
 - a second ~~type~~ species of brake component,
 - at least one vehicle performance sensor,
 - a controller receiving sensor signals from said sensor and in electrical communication with said first and second ~~type~~ species of brake components for actuation,
 - a first control scheme used by said controller for generating control signals for said first ~~type~~ species of brake component, and
 - a second control scheme used by said controller for generating control signals for said second ~~type~~ species of brake component.
2. (currently amended) The brake system of claim 1 including a manual input for overriding control signals for the first ~~type~~ species of brake component.

3. (currently amended) The brake system of claim 1 including a manual input for overriding control signals for the second ~~type~~ species of brake component.

4. (currently amended) The brake system of claim 1 wherein said controller prevents the first and second ~~type~~ species of brake components from cycling.

5. (currently amended) The brake system of claim 1 including a source of pressurized air for use in actuating at least one of the first and second ~~type~~ species of brake components.

6. (currently amended) The brake system of claim 1 including a source of electrical energy for use in actuating at least one of the first and second ~~type~~ species of brake components.

7. (currently amended) The brake system of claim 1 wherein at least one of said first and second control schemes is configured in a form selected from ~~the group consisting at least one~~ of hardware, software, firmware[[,]] and a pluggable module ~~and combinations of these~~.

8. (original) The brake system of claim 1 wherein said controller and at least one of said first and second control schemes are connected by a data bus.

9. (original) The brake system of claim 1 wherein said controller and said sensor are connected by a communication bus.

10. (currently amended) The brake system of claim 1 wherein said controller and said first and second ~~type~~ species of brake components are connected by a control network.

11. (currently amended) The brake system of claim 1 wherein said first and second ~~types~~ species of brake component are connected together in an application network.

12. (original) A brake system for a heavy vehicle, comprising:

a brake component,

at least one vehicle performance sensor,

a controller receiving sensor signals from said sensor and in electrical communication with said brake component for actuation,

a first control scheme used by said controller for generating first control signals for said brake component,

a second control scheme used by said controller for generating second control signals for said brake component, and

a conflict resolution scheme used by said controller for resolving conflicts between the first and second control signals.

13. (original) The brake system of claim 12 including a manual input for overriding control signals for the brake component.

14. (currently amended) The brake system of claim 12 wherein said controller prevents the ~~first and second type of~~ brake components from cycling.

15. (original) The brake system of claim 12 including a source of pressurized air for use in actuating the brake component.

16. (original) The brake system of claim 12 including a source of electrical energy for use in actuating the brake component.

17. (currently amended) The brake system of claim 12 wherein at least one of said first and second control schemes is configured in a form selected from ~~the group consisting~~ at least one of hardware, software, firmware[[,]] and a pluggable module ~~and combinations of these.~~

18. (currently amended) The brake system of claim 12 wherein said conflict resolution scheme is configured in a form selected from ~~the group consisting~~ at least one of hardware, software, firmware[[,]] and a pluggable module ~~and combinations of these.~~

19. (previously presented) The brake system of claim 12 wherein said conflict resolution scheme comprises part of one or both of said first and second control schemes.

20. (previously presented) The brake system of claim 12 wherein said controller and at least one of said first and second control schemes are connected by a data bus.

21. (previously presented) The brake system of claim 12 wherein said controller and said sensor are connected by a communication bus.

22. (previously presented) The brake system of claim 12 wherein said controller and said brake component are connected by a control network.

23. (currently amended) A brake system for a heavy vehicle, comprising:

a first ~~type~~ species of brake component,

a second ~~type~~ species of brake component,

at least one vehicle performance sensor,

a central control network for receiving sensor signals from said sensor and in electrical communication with said first and second ~~type~~ species of brake components for transmitting control signals thereto, and

a central supply network for supplying energy to said first and second ~~type~~ species of brake components for actuating said first and second ~~type~~ species of brake components in response to the control signals received from said central control network.

24. (currently amended) The brake system of claim 23 including a manual input for overriding control signals for the first ~~type~~ species of brake component.

25. (currently amended) The brake system of claim 23 including a manual input for overriding control signals for the second ~~type~~ species of brake component.

26. (currently amended) The brake system of claim 23 wherein said central control network prevents the first and second ~~type~~ species of brake components from cycling.

27. (original) The brake system of claim 23 wherein the energy supplied by said central supply network comprises pneumatic energy.

28. (original) The brake system of claim 23 wherein the energy supplied by said central supply network comprises electrical energy.

29-36. (cancelled)

Response to Official Action
Application No. 10/612,178
Page 10

Amendments to the Drawings:

No amendments are made to the Drawings herein.